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PATENT COOPERATION TREATY

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PCT/DE2003/003453



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2002P16720WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/DE2003/003453	International filing date (day/month/year) 17 October 2003 (17.10.2003)	Priority date (day/month/year) 30 October 2002 (30.10.2002)
International Patent Classification (IPC) or national classification and IPC G06F 9/44		
Applicant SIEMENS AKTIENGESELLSCHAFT		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 19 August 2004 (19.08.2004)	Date of completion of this report 08 June 2005 (08.06.2005)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DE2003/003453

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages _____ 1-9 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages _____ 1-6 _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the drawings:
 pages _____ 1/1 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/DE 03/03453

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-6	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-6	NO
Industrial applicability (IA)	Claims	1-6	YES
	Claims		NO

2. Citations and explanations

1. Reference is made to the following documents:

D1: VAN DER VLIST E: "Using W3C XML schema" XML.COM
WEBPORTAL, 17 October 2001 (2001-10-17),
XP002972461

D2: MARY PULVERMACHER: "XML Schemas: Best Practices ?
Versioning" MESSAGE FROM A NEWSGROUP [online],
5 September 2001 (2001-09-05), XP002315103
Newsgroup: xml-dev, found on the Internet:
URL: <<http://lists.xml.org/archives/xml-dev/200109/msg00081.html>> [found on 2005-01-25]

INDEPENDENT CLAIMS 1 AND 4

2. The application fails to meet the requirements of PCT Article 33(1) because the subject matter of claims 1 and 4 does not involve an inventive step (PCT Article 33(3)).

Document D1, which is considered to be the prior art closest to the subject matter of claim 1, discloses the following (the references in parentheses are to D1):

Method for defining structures of object models

and/or data models, in which the structures are described by schemas (page 1, lines 32 to 38; "To write a schema for this document [...]"; see also the example), the namespace used in each schema (page 10, lines 48 to 56; "Each W3C XML Schema document is bound to a specific namespace [...]") and the type and element names used in each schema being retained (e.g. page 2, lines 7 to 8), and types and elements of a schema being extended while the type and element names are retained (page 9, lines 31 to 56; "the second inclusion mechanism, XS:redefine [...] it lets you redefine declarations from the included schema"; see also the example), with non-extended types and elements being adopted without modification by the second schema from the types and elements used in the first schema (page 9, lines 31 to 56; "xs:include is similar to a copy and paste of the definitions of the included schema", "xs:redefine" - as above).

The subject matter of claim 1 differs from what is known from D1 in that a first attribute of the schema contains a version indicator, and in that the second schema is a newer version of the first schema.

The problem addressed by the invention can thus be seen as that of how to enable a schema to show which of the schemas is the newest.

The solution proposed in claim 1 of the present application cannot be considered inventive (PCT Article 33(3)) for the following reasons:

When confronting this problem a person skilled in the

art would make sure that the schema version was included in the schema. This feature has already been used for the same purpose in document D2, which describes the best practice for XML schema versioning. One possibility is to include a schema version indicator in a first attribute of the schema (page 1, first paragraph - "Changing the Schema Version Attribute"; see also the example). For a person skilled in the art the incorporation of this feature in the disclosure of D1 would be an obvious and routine solution to the problem of interest.

3. Claim 4 relates to a system that corresponds to the method of claim 1. This system, like the method of claim 1, can be derived from D1. The subject matter of claim 4 therefore does not involve an inventive step either (PCT Article 33(3)).

DEPENDENT CLAIMS 2, 3, 5 AND 6

4. Dependent claims 2, 3, 5 and 6 do not contain any features that meet the PCT requirements in respect of inventive step when combined with the features of any of the back-referenced claims (see documents D1 and D2 and the passages cited in the international search report).